

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions, and listings, of claims in the captioned patent application:

Listing of Claims:

1. (Currently Amended) An electrically conducting lead comprising:
a substantially electrically-insulative elongate body; and
an electrically conductive element, wound around a length of said elongate body, having first and second ends, ~~and ends and~~ comprising a plurality of ~~layers each~~ layers, each said layer comprising a plurality of electrical conductors positioned within said conductive element, wherein such that each first ends of each of said conductors at the first end of said conductive element are correspondingly identifiable at said second end of said conductive element as second ends of each of said conductors, based on the corresponding position within said conductive element of each of said first and second ends of said conductors with respect to the positions of the other conductors.
2. (Original) The electrically conducting lead of claim 1 wherein the wound arrangement of the electrically conductive element is a helically wound arrangement.
3. (Original) The electrically conducting lead of claim 1 wherein the electrically conductive element extends from a first end to a second end of the lead.
4. (Original) The electrically conducting lead of claim 3 wherein the longitudinal extent of each of said electrical conductors over the length of the lead from the first end to the second end is substantially identical.
5. (Original) The electrically conducting lead of claim 4 wherein the longitudinal extent of the electrical conductors over the length of the lead from the first end to the second end is identical.

6. (Previously Presented) The electrically conducting lead of claim 1 wherein the electrically conductive element configured to extend through said portion of the insulative body is wound in an anticlockwise direction for a length of said portion and in a clockwise direction for a length of said portion.
7. (Original) The electrically conducting lead of claim 6 wherein the length of the conductive element that is wound in an anticlockwise manner is substantially equal to the length of the conductive element that is wound in a clockwise manner.
8. (Original) The electrically conducting lead of claim 7 wherein the length of the conductive element that is wound in an anticlockwise manner is equal to the length of the conductive element that is wound in a clockwise manner.
9. (Original) The electrically conducting lead of claim 7 wherein at the transition from anticlockwise to clockwise windings, the conductive element is folded back on itself.
10. (Original) The electrically conducting lead of claim 1 wherein the conductive element is wound in one direction for the length of said portion of the insulative body and further wherein the layer is twisted by 180.degree. at a location along the length of the body.
11. (Original) The electrically conducting lead of claim 10 wherein the twist is at a midway point of the length of the wound conductive element in the lead.
12. (Original) The electrically conducting lead of claim 1 wherein each layer of the conductive element is comprised of a plurality of separate electrical conductors, with each layer having the same number of conductors as the other layers in the element.
13. (Original) The electrically conducting lead of claim 1 wherein each layer of the conductive element is comprised of a plurality of separate electrical conductors, with the number of conductors of at least one of the layers varying from the number in one, more or all of the other layers of the element.

14. (Original) The electrically conducting lead of claim 1 wherein the electrical conductors are made of platinum.

15-23. (Cancelled)

24. (Currently Amended) An electrically conducting lead comprising:

a substantially electrically insulative elongate body; and

an electrically conductive element, wound around a length of said elongate body, having first and second ends, ~~and ends and~~ comprising a plurality of ~~layers each~~ layers, each said layer comprising a plurality of electrical conductors,

wherein said plurality of electrical conductors of at least one of the layers varies in number from the number of conductors in at least one of the other layers, and further wherein said plurality of electrical conductors are positioned within said conductive element such that ~~each first ends of each of~~ each first ends of each of said conductors at the first end of said conductive element are correspondingly identifiable at said second end of said conductive element as second ends of each of said conductors, based on the corresponding position within said conductive element of each of said first and second ends of said conductors with respect to the positions of the other conductors.

25. (Original) The electrically conducting lead of claim 24 wherein the number of conductors in said one of the layers varies from the number in more than one of the other layers of the element.

26. (Currently Amended) An electrically conducting lead comprising:
a substantially electrically-insulative elongate body; and
an electrically conductive element helically wound around a length of said elongate having first and second ends, ~~and ends~~ and comprising a plurality of ~~layers each~~ layers, each said layer comprising a plurality of electrical conductors positioned within said conductive element such that the position of each of said plurality of electrical conductors comprising each layer with respect to said plurality of electrical conductors of ~~neighbouring~~ neighboring layers remain constant between said first and said second ends of said insulative body, ~~and further~~ wherein each of said plurality of electrical conductors are positioned such that ~~each~~ first ends of each of said conductors at the first end of said conductive element are correspondingly identifiable at said second end of said conductive element as second ends of each of said conductors, based on the corresponding position within said conductive element of each of said first and second ends of said conductors with respect to the positions of the other conductors.

27-28. (Cancelled)

29. (Previously Presented) The electrically conducting lead of claim 7 wherein with the longitudinal extent of each of said electrical conductors over said portion of the lead are substantially identical when in said wound arrangement.

30. (New) The electrically conducting lead of claim 1, wherein said identification of each said second ends of said conductors is based on direct visualization of the corresponding positions of each said first ends.